

REMARKS

Claims 1-23 are currently pending in the present application, with Claims 1-3 and 11-23 being allowed, and Claims 4-7 and 9 being amended. Reconsideration and reexamination of the claims are respectfully requested.

The Examiner rejected Claims 4-9 under 35 U.S.C. § 102(b) as being anticipated by Suzuki et al. (U.S. Patent No. 6,150,598). This rejection is respectfully traversed with respect to the amended claims.

As previously discussed, the present invention is directed to a system and method for generating waveforms, processing performance data, and recording waveforms using characteristic properties of the musical tones. More specifically, the present invention is directed to a method for storing musical note performances, or partial waveforms, in accordance with certain property characteristics such as pitch, tone length, or the intensity of the tone being performed (see p.20 of the present application). Once a partial waveform and its characteristic properties are stored from a performance, the corresponding partial waveform data can later be retrieved to generate or reproduce the partial waveform by detecting the same or similar characteristic properties from a performance. More specifically, in response to a user who, for instance, operates an electronic musical instrument such as an electronic keyboard, the present invention detects the characteristic properties of the musical notes performed and retrieves the partial waveform data having the most similar characteristic properties. By using partial waveforms having similar property characteristics to generate a waveform, the present invention provides more faithful reproduction of a musical performance to correspond with a user's particular style of rendition.

With respect to Claim 4, the claimed invention is specifically directed to a method for generating waveforms in accordance with performance events and reproduced performance

information. More specifically, the invention claimed by Claim 4 automatically generates accompanying tones as well as reproduced stored performance information in accordance with a tempo clock while a player performs in real-time (performance events). In the claimed invention, waveforms are generated according to real-time performance and reproduced performance information. For instance, waveforms are generated by detecting a note-on of the real-time performance and acquiring following tone data based on the following events in the performance information.

As also previously discussed, Suzuki is directed to sampling of a live performance and analyzing the sampled waveforms to extrapolate certain articulations of the performance. The musical phrases of the live performance are categorized as under a certain articulation or style of rendition, and can later be reproduced in response to a user designating the performance to be a certain articulation or style of rendition (See Col. 19, lines 27-35). Once the articulation or style of rendition is designated by the user in advance of the performance, waveforms corresponding to the designated articulation or style of rendition are then accessed and retrieved to generate waveforms from subsequent performance.

With respect to amended Claim 4, Suzuki does not contain any disclosure of suggestion of generating waveforms according to both real-time performance and reproduced performance information, as set forth in amended Claim 4. Furthermore, Suzuki does not teach or suggest detecting a performance event that follows one of the inputted performance events based on the stored performance information according to the tempo clock, and generating a waveform according to the inputted performance events and the detected performance events. Rather, Suzuki simply teaches sampling the waveform data from an actual 2 performance and analyzing the waveforms thereafter.

With respect to Claims 5 and 6, Suzuki does not contain any disclosure of suggestion of storing property data representing characteristics of two tones consisting of a tone corresponding to each of the partial waveforms and a preceding or following tone, and retrieving the database according to characteristic data of two tones consisting of a performed present tone and an performed preceding or following tone generated before or after the performed present tone, as set forth in Claims 5 and 6. Instead, Suzuki simply discloses property data representing articulations or style of rendition of the performance (see Col. 10, lines 4-8), and retrieving database according to a certain articulation or style of rendition (see Col. 19, lines 27-35).

With respect to Claim 7, Suzuki does not any disclosure of suggestion of dividing a phrase waveform into partial waveform data according to a characteristic of each of the notes in performance data. Furthermore, Suzuki does not teach or suggest recording a phrase waveform sounded by the player and dividing the phrase waveform into partial waveform data according to a characteristic of each of the notes in the performance data. Rather Suzuki simply divides a phrase waveform into partial waveform data according to respective articulation or style of rendition (see Col. 10, lines 4-8, lines 15-19, and lines 23-31).


In view of the above, Applicants respectfully submit that Claims 4-9 are not anticipated by, nor obvious in view of, Suzuki. Applicants therefore submit that each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to withdraw the outstanding rejection of the claims and to pass this application to issue. If it is determined that a telephone conversation would expedite the prosecution of this application, the Examiner is invited to telephone the undersigned at the number given below.

In the unlikely event that the transmittal letter is separated from this document and the Patent

Office determines that an extension and/or other relief is required, applicant petitions for any required relief including extensions of time and authorizes the Assistant Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to **Deposit Account No. 03-1952** referencing docket no. 393032012000. However, the Assistant Commissioner is not authorized to charge the cost of the issue fee to the Deposit Account.

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Respectfully submitted,

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